

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 1-37 have been rejected by the Examiner. Claim 32 has been amended to correct a typographical error included therein. No new matter has been added. Accordingly, Claims 1-37 will be pending in the present application upon entry of this Reply and Amendment.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claim Rejections – 35 U.S.C. § 112

On page 2 of the Office Action, the Examiner rejected Claims 1-17 under 35 U.S.C. § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated:

Claims 1 [sic] recites a member which appears to be recited as a connector and a component. The applicant needs to either change claim 1 or have the connector be defined as the member and component. It is not clear if the member or the connector or component is correctly recited. This is confusingly worded because the same element is being renamed but recited as though it were separate elements.

The Applicants respectfully traverse the rejection of Claims 1-17. Claim 1 recites, with emphasis added, “a first assembly including a first shaft and a first gear . . . a member configured for removable coupling to a motor shaft of a rotary power tool and for removable coupling with the first assembly; wherein at least a portion of the member is configured for insertion into a component of the first assembly.”

One exemplary embodiment of the “member” recited in Claim 1 is shown as member 140 in Figure 2 of the present Application. As described at paragraph [0053] of the present Application, the “member or element such as a connector 140 . . . is configured for coupling . . . a power tool to the female connector 156.” In paragraph [0048] of the present Specification, the “female connector 156” is alternatively referred to as a “component of the

assembly” that “includes an aperture provided therein for coupling to a connector utilized to couple the attachment to a power tool.” Paragraph [0082] describes another embodiment in which the shaft itself has an aperture or opening therein for receiving a male connector.

Nowhere in Claim 1 is the member “recited as a connector and a component” as suggested by the Examiner. Instead, Claim 1 clearly recites that the member is configured for insertion into a component of the first assembly. Dependent Claim 4 further limits Claim 1 by stating that the “component comprises a connector coupled to the first shaft.” Thus, Claim 1 does not specify which component is configured for having the member inserted therein, while Claim 4 indicates that it is a connector (e.g., such as female connector 156 described above) that is coupled to the first shaft.

One of ordinary skill in the art reviewing the present disclosure would readily understand what is meant by the language used in Claim 1, and therefore, Claim 1 is not indefinite under 35 U.S.C. § 112 ¶ 2.

Independent Claim 17 is similarly definite in that it recites “a component of the first assembly includes an aperture for receiving therein at least a portion of a connector configured for removable coupling between a motor shaft of a rotary power tool and the component.” One of ordinary skill in the art reviewing the present Specification (e.g., paragraphs [0048] and [0053] would readily understand what is meant by the terminology used in Claim 17.

The Applicants submit that Claims 1-17 are not indefinite to those of ordinary skill in the art reviewing such claims in light of the present Specification. Accordingly, the Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 1-17 under 35 U.S.C. § 112 ¶ 2.

Claim Rejections – 35 U.S.C. § 102(b) - Kopras

1. Kopras

On page 2 of the Office Action, the Examiner rejected Claims 1-2 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,048,260 to Kopras. The Applicants

respectfully traverse this rejection. The rejection should be withdrawn because Kopras does not disclose at least one limitation recited in independent Claim 1.

Kopras does not identically disclose a “member” such as that recited in Claim 1. Again, as described above with respect to the rejection under 35 U.S.C. § 112, the “member” has a particular configuration as recited in Claim 1. Claim 1 recites that the “member” is “configured for removable coupling to a motor shaft of a rotary power tool and for removable coupling with the first assembly” where the first assembly includes “a first shaft and a first gear” and where “at least a portion of the member is configured for insertion into a component of the first assembly.”

In contrast, Kopras discloses a “mechanical structure 32” that allows a “first shaft 50 to be attached to the end of the cutting tool motor shaft” (see Kopras at col. 8, lines 29-35). There is no indication that the “mechanical structure 32” of Kopras is inserted into the “first shaft 50” or any other structure. Instead, the “mechanical structure 32” is described at col. 6, lines 19-44 as being a “conventional drill-type chuck” or a “collet-type system.”

Accordingly, the rejection of Claim 1 over Kopras is improper and should be withdrawn. Dependent Claim 2, which depends from independent Claim 1, is also patentable. See 35 U.S.C. § 112 ¶ 4.

The Applicants respectfully request withdrawal of the rejection of Claims 1-2 under 35 U.S.C. § 102(b).

2. Prell et al.

On page 2 of the Office Action, the Examiner rejected Claims 1-2 and 6-16 under 35 U.S.C. § 102(b) as being anticipated by EP 1129825 to Prell et al. The Applicants respectfully traverse this rejection. The rejection should be withdrawn because Prell et al. does not disclose at least one limitation recited in independent Claim 1.

In rejecting Claims 1-2 and 6-16, the Examiner stated that in Prell et al., “[t]he connector is Figure 2.” It is unclear what is meant by this statement. If the Examiner means to suggest that the “driver nut 56” shown in Figure 2 of Prell et al. is the same as the

“member” recited in Claim 1, then the Applicants respectfully disagree. Prell et al. provides the following description of the “driver nut 56” at paragraph [0033], with underlining added by the Applicants for emphasis:

[0033] In accordance with yet another important aspect of the present invention, the driver nut 56 shown in FIGS. 2 and 3 has a hexagonal outer configuration so that a wrench can be used to apply it to or remove it from the output shaft 42. The driver nut has a hollow interior 76 that provided with a threaded surface and is sized so that the driver nut 56 can be screwed onto the output shaft 42. Again, other attachment technologies besides threaded engagement are contemplated. The right end portion 78 has an opening 80 that is smaller than the threaded interior 76 and thereby forms an interior annular shelf 82 at the right end portion 78 that engages the outer end of the output shaft 42 when the nut 56 is tightened on the output shaft. The opening 80 also has an interior grooved configuration that preferably contains 8 symmetrically located grooves 84. This 8 point groove configuration is used to provide easier insertion of the square end 74 of the flexible shaft 30 into the driver nut 56 when the attachment is mounted to the rotary hand tool 38. It should be understood that a 4 point grooved configuration could be used, but with a configuration, the square ended shaft would have to be more accurately aligned to enable insertion of the flexible shaft 30.

Thus, Prell et al. also does not disclose a “member” such as that recited in Claim 1. Specifically, Prell et al. does not disclose a “member configured for removable coupling to a motor shaft of a rotary power tool and for removable coupling with the first assembly; wherein at least a portion of the member is configured for insertion into a component of the first assembly” (where the first assembly includes a first shaft and a first gear), as recited in Claim 1.

Accordingly, the rejection of Claim 1 over Prell et al. is improper and should be withdrawn. Dependent Claims 2 and 6-16, which depend from independent Claim 1, is also patentable. See 35 U.S.C. § 112 ¶ 4.

The Applicants respectfully request withdrawal of the rejection of Claims 1-2 under 35 U.S.C. § 102(b).

Claim Rejections – 35 U.S.C. § 103

On page 3 of the Office Action, the Examiner rejected Claims 3-5 and 17-37 as being unpatentable over Prell et al. in view of U.S. Patent No. 3,574,374 to Keller et al. under 35 U.S.C. § 103(a). The Applicants respectfully traverse this rejection. The rejection should be withdrawn because at least one limitation of each of the rejected claims is not taught or suggested by Prell et al., alone or in combination with Keller et al.

In rejecting Claim 1, the Examiner stated:

- a. EP 1129825 A2 discloses the claimed invention except for an aperture component in the first shaft connecting the connector.
- b. Keller discloses an attachment having a shaft (32) with an aperture (100) for attaching to a connector (60) which allows for an alternative way connecting the shaft to a motor for powering the attachment.
- c. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the EP 1129825 A2 device by replacing the shaft with an aperture as taught by Keller which allows for an alternative way connecting the shaft to a motor for powering the attachment.

At the outset, Keller et al. discloses a “surgical instrument” that “includes a body member 10 and an interchangeable head member 12.” The “head member” includes an “output shaft 32” and the “body member 10” includes a “drive shaft 56” that includes a “forward end part 60.” It should be immediately noted that there is no teaching or suggestion in Keller et al. that the “drive shaft 56” is removable from the “body member 10” of the “surgical instrument” disclosed therein.

Claim 1 is in independent form and recites, “a first assembly including a first shaft and a first gear . . . and a member configured for removable coupling to a motor shaft of a rotary power tool and for removable coupling with the first assembly; wherein at least a portion of the member is configured for insertion into a component of the first assembly.” Rejected Claims 3-5 depend from Claim 1.

As described above, Prell et al. does not teach or suggest a “member” such as that recited in Claim 1 (e.g., Prell et al. does not teach or suggest a member that may be inserted into a component of an assembly that includes a first shaft and a first gear). Keller et al. also does not teach or suggest such an element. For example, the “drive shaft 56” that includes “forward end part 60” in Keller et al. is not configured for “removable coupling to a motor shaft of a rotary power tool.” Accordingly, neither Prell et al. nor Keller et al., alone or in any proper combination, teach or suggest the “member” recited in Claim 1. Claims 3-5, which depend from Claim 1, are therefore allowable.

Independent Claims 17 and 25, along with their associated dependent Claims 18-24 and 26-31, are allowable for similar reasons.

Claim 17 is in independent form and recites, “a first assembly comprising a first gear coupled to a first shaft . . . wherein a component of the first assembly includes an aperture for receiving therein at least a portion of a connector configured for removable coupling between a motor shaft of a rotary power tool and the component.” Rejected Claims 18-24 depend from Claim 17.

Claim 25 is in independent form and recites, “a first assembly comprising a first gear provided on a first shaft . . . and a member for removable coupling to the first assembly and to a drive shaft of a rotary power tool; wherein the first shaft includes an aperture for receiving therein a portion of the member.” Rejected Claims 26-31 depend from Claim 25.

As with Claim 1, neither Prell et al. nor Keller et al., alone or in any proper combination, teach or suggest the “connector” recited in Claim 17 or the “member” recited in Claim 25.

Claim 32 is in independent form and recites, “A connector for coupling a rotary power tool to an attachment for the rotary power tool, the connector comprising: a shaft having a central longitudinal axis, the shaft configured for coupling to a drive shaft of a rotary power tool; and a head portion having a plurality of surfaces, at least a portion the head portion having a generally polygonal cross-section transverse to the central longitudinal axis, at least one of the plurality of surfaces being convex with respect to the central longitudinal axis in the direction of the central longitudinal axis; wherein the head portion is configured for

engaging a polygonal aperture provided in a component coupled to a rotary member of the attachment.” Rejected Claims 33-37 depend from Claim 32.

Neither Prell et al. nor Keller et al., alone or in any proper combination, teach or suggest the “connector” as recited in independent Claim 32. For example, Claim 32 requires that the connector include a “head portion having a plurality of surfaces,” and that “at least a portion of the head portion” has “a generally polygonal cross-section transverse to the central longitudinal axis, at least one of the plurality of surfaces being convex with respect to the central longitudinal axis in the direction of the central longitudinal axis.” No such structure is described, taught, or suggested in Prell et al. or Keller et al.

Accordingly, at least one limitation of each of independent Claims 1, 17, 25, and 32 (and their associated dependent claims) is not taught or suggested by the combination of Prell et al. and Keller et al. Accordingly, Claims 3-5 and 17-37, considered as a whole, would not have been obvious in view of Prell et al. and/or Keller et al.

The Applicants respectfully request withdrawal of the rejection of Claims 3-5 and 17-37 under 35 U.S.C. § 103(a).

* * *

It is submitted that each outstanding objection and rejection to the Application has been overcome, and that the Application is in a condition for allowance. The Applicants request consideration and allowance of all pending Claims 1-37.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of

papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R.
§1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

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